

The Iron Brigade

A STORY OF THE ARMY OF THE POTOMAC

By GEN. CHARLES KING
Author of "The Iron Brigade," "The Iron Brigade's Story," "The Iron Brigade's History," etc.

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CHAPTER XIX.—CONTINUED.

In a grove toward the Potomac, backed by a ridge, Stuart's restless horsemen and Pelham's ready guns are lurking, hidden from our view. So are the crouching guardians of the groves and fields to the south. Again is the great organizer shoving his infantry in to the attack of an army in position, over ground unsearched by cavalry, though cavalry are with him in abundance, eager to be of service, but he knows not how to use them. East of the big cornfield, to their left front as they march, is still another grove, the east wood, and in long, thin line, at right angles to the pike, stretching through the woods, through the cornfield, silently awaiting their coming foe, are aligned the very men they fought so bravely at sunset of that August evening barely three weeks back.

And, just as before, not a man of the hostile line is seen when the guns begin the battle. Off to the left front, near the east wood, a southern battery spies the blue battalions issuing from the skirt of the northward wood nearly a mile away, dressed on their waving colors, the skirmishers trotting well out to the front. Then loud below the guns and shriek the shells as line upon line, brigade upon brigade, Hooker sends his new command, the new-born First corps, in to its bloody baptism. The confederate flank is covered by Stuart and his dashing horse batteries, and there is abundant room and more than abundant need for similar troops between Doubleday's right and the river, but not so much as a squadron rides where it may be of such infinite service. McClellan holds his horses east of the dividing stream, for again, as on the peninsula, are his forces thus bested.

Full 500 yards, almost due south, march the doubled lines in blue. Meade's little division of Pennsylvanians alongside and east of Doubleday's. Hatch's old brigade is on the left of Gibbon's, Patrick in its rear, in support, and for a time the Sixth Wisconsin, at the post of honor, has the Hagerstown road on its right for a guide. But now comes a thin patch of woods and a turn—only a slight turn—in the line of the pike, and here, little by little, through pressure from the center, the first company begins to edge out over the highway, the second follows, and by the time they are bursting through the barnyards and farm enclosures at Miller's, and the shells have changed to shrapnel and men are dropping fast, the entire right wing of the Sixth is across the pike and wading through that westward field. Then up the pike, just as at Gainesville, comes galloping battery "B," and into the farmyard it turns, and there, whirling the guns in line to the south, delivers its resonant answer. The Sixth is just striding out from the cornfield and into the woods to the west of the road when, sudden as a thunderbolt, there bursts the crash of an infantry volley, and from front and right flank, so close that the smoke jets forth in their faces, a low-aimed lead storm shrieks through their ranks and down goes half the wing. Then blaze the whole west wood and the hedgerow south of the cornfield, and all from an unseen foe: Flesh and blood cannot stand such a gale in the open. The survivors swing back to the highway, rallying instantly at the edge of the field, and there, flat on their faces, they take vigorous hand in the fight, while Patrick's men, close at their heels, rush in to prolong the line to the right and fill the gaps at the front. Five minutes—and both woods, east and west, and the intervening cornfields are in dense clouds of sulphur smoke, for Ricketts, too, has come up with his division on the left of the corps, and a battle of giants is on.

But vain are the efforts of Hooker's brave men. Three fine, disciplined divisions he has led to the field, thinking to turn an exposed left flank, while Mansfield, with his new Twelfth corps, supports the attack, and the main army, advancing in force from the line of the Antietam, covers and holds the long confederate front extending far to the south of the town. Just whom to blame nobody will say, but, not until Hooker's right division is swept by lapping fires and flattened out by the fierce storm of lead; not until Meade and Ricketts, farther to the east, have charged again in line with Doubleday's left; not until Doubleday, not whipped, but brought to a stand, is fairly battling for breath, do the brigades of Mansfield appear at the east, coming into action, and even then by no means prepared. Many battalions are new and unskilled, and before the brigade can be brought into line, gallant, gray-headed old Mansfield drops dying from his horse. Williams succeeds to command; but before Hooker half finishes giving his orders, he, too, commanding all troops at that moment west of the stream, is stricken and borne from the field, stripping it thereby of both corps commanders, and leaving the right to the care of men ignorant of McClellan's plans, and confronted by the best fighters in the southern host.

Campbell, the captain, is shot from his saddle. Half the right wing of the Sixth is gone. Half the commanders are now killed or wounded. Not a lieutenant colonel is left in the Iron Brigade. Allen, Bragg and Bachman are borne from the line, the last named by his soldier grave. The lone effort is fruitless, save for its glories and the fierce punishment given the foe in front. There, indeed, is destruction equal to this in the cornfields and along the Hagerstown pike. No wonder old Jack bow his head in grief and supplication. Again he has lost both division commanders, Lawton and Jones being wounded. So, too, falls Douglas, heading Lawton's brigade, and with al-

most breaking heart Jackson sends word to his beloved general that half the commands of Lawton and Hays and fully one-third of Trimble's are killed or wounded, as are all regimental commanders but two. Thank God, 'tis their last fight with the Iron Brigade.

Before breakfast is over at the Pry house, where sit Little Mac and the big staff, Hooker's fight on the right flank is over and done. Then another is started in front of the east wood, and later others occur along the line to the south, and wherever a corps is sent into attack, Lee scrapes up a corps to meet and repel it. Concentrated action might have given the union a needed, a much needed, victory, but concert there is none. One splendid and disciplined corps has been held in reserve, and when toward the last the serene young general-in-chief, never excited or hurried, never able to see flaw in his own dispositions, seemed yielding to pressure and about sending them in, he hearkens to the words of their brilliant commander, so said veteran regulars at the time: "Remember, general, I command the last reserve of the Army of the Potomac."

And so night settles down and Lee's little army, superbly led, has beaten back in succession the scattered attacks of McClellan's overwhelming force. All through the hours of darkness the surgeons are at work with the thousands of wounded. All through the following day Lee waits for renewal of the battle, but McClellan has had enough. With the coming of another night, therefore, gathering up his wounded and prisoners, sending his trains ahead, the great Virginian silently moves his columns down to the fords of the Potomac, and by dawn of the 19th all are safely across. Lee has slipped away.

There is a significance in the greeting accorded the little soldier still in supreme command when he rides his lines a day after the battle. The corps of Porter, held throughout the combat in safe reserve, swings its caps and cheers with great enthusiasm. The



WINTER.

corps of Sumner stands with modified rejoicing. The men of Mansfield rise and salute in silence. The thinned battalions of the First corps make no sign whatever.

Witnessing this sight, Fred Benton contrasts it with another which it was his privilege to note the previous day. He and other officers had been sent under flag of truce within the picket lines of the southern army, to seek the wounded and to render aid. All about the barn and buildings of the Miller farm, where the brigade had rallied and hung so long, lay scores of stricken men for whom the surgeons were doing their best, but so very many seemed past help. Along the pike the Georgians, too, lay thick, and gray uniforms officers moved to and fro among them, or conversed in low tones, curiously scanning from time to time the two or three staff officials in blue who followed the surgeons, pencil and notebook in hand. Suddenly the talking ceased, for, issuing from a narrow roadway that trended westward from the pike, there came a tall, commanding-looking officer, gray-bearded, yet alert, a soldier who acknowledged with grave courtesy the salutes that greeted him on every hand. Men sprang to their feet and gazed at him almost in adoration. Even the wounded strove to rise. Some few hailed him with feeble, childish voices. As for Benton and his two associates, they needed not the little group of staff and orderlies to confirm them in their belief. They knew him at a glance—the great Virginia leader—and Benton, instantly, the others following, stepped forward and stood at salute. Lee saw it, and turning so as to half face the northerners, with punctilious courtesy lifted his hat, then quickly reined back as a dust-covered, battle-stained battery came jingling out from the lane and, turning into the highway, pulled wearily on to where the spires of the Maryland town pierced the blue beyond the southward wood. Jaded and worn were the horses, black and powder-stained the men, and of a sudden one of these, a slender strapping, joggling along beside his gun, caught sight of the group of horsemen, darted from his place to where the commanding general, the picture of the soldier and the gentleman, sat in saddle at the roadside, and there, with boyish laugh, held forth a grimy hand. "It's Bob," he cried. "Don't you know me, father?" And Lee, the cavalier, bent low and with love and tenderness, with who can say what pride and rejoicing, clasped the hand of the private soldier in the Rockledge artillery, his gallant younger son. In what other army would one see the like of that?

Then the general rode on toward the Dunker church, where still the men of Jackson lay in readiness, and then up Benton rank after rank with mighty shout that marked his onward going about the weary yet intensely loyal line until lost within the distant walls of Sharpsburg. Despite the dire carnage of the day of battle, there beat no soldier heart in all the southern host that was not true to Lee.

Presently, as the time accorded for their sad mission had well nigh expired, Benton was aware of a young officer, in the uniform of the horse artillery, who had been chatting with comrades across the way, and now, sit-

mounting, stepped briskly toward him, lifting a jaunty forage cap. "Your pardon, sir," he courteously spoke. "Is this Capt. Benton who visited Charlottesville not long ago? My name is Pelham," and there was just the suspicion of a smile in the keen young face.

"Capt. Benton, but not captain," answered Benton, with responsive grin, though the mention of the name was something that put him on his guard. What was it young Winston had said about Maud Pelham and Rosalie? This must be the boy captain of the name, of whom he had heard so much—Jeb Stuart's crack light gunner.

"Yes, I have cousins there," continued Pelham, as though reading Benton's thoughts. "But it is long since we met. You are the man, as I happen to know, who showed so much courtesy to Lieut. Winston, as well as to Jack Chilton. Now you can do me a favor if you should see Mr. Chilton, and that is, tell him for me that the men at the front utterly disapprove the doings of that self-styled citizens' committee at the rear. Those people," he went on disdainfully, "are too old or too feeble-minded to fight like men. They stab it's women."

"It will comfort them—or rather the doctor—to get such a message from you, Capt. Pelham," answered Benton, almost eagerly, "and I shall write that he does get it. I shall write that you will. An old school friend of mine, Paul Ladue, is a staff officer in Ewell's division. Give him a greeting for me, will you?"

"Ladue," said Pelham, his fine features clouding instantly. "I fear I heard—Oh, Capt. Lamar," he called, "what Lieut. Ladue was it brought that note Wednesday morning to Gen. Stuart?"

"Paul Ladue, Eleventh Alabama," was the prompt answer. "Killed right here in front of the battery not half an hour afterwards."

CHAPTER XX.

A CRY FROM THE AMBULANCE.

The autumn, the wasted autumn has gone, "the winter of our discontent" indeed has come. For weeks the army hangs there inert and chafing along the Potomac, while Lee and his bronzed veterans saunter away through the Shenandoah, "feeding on the fat of the land." Marveling at the inaction of McClellan, Stuart rides back with 1,800 horse and two light guns and, of course, Pelham; and, just as he did a few months earlier down on the peninsula, jogs contemptuously clear round the bewildered and indignant divisions, laughing at the effort of Pleasanton to catch or others to head him. McClellan says his cavalry is too weary and broken down to accomplish anything, and the president mildly asks what it has been doing to so fatigue it. Another correspondence of complaints begins, and finally ends at Warrenton, when the order comes early in November that severs once and for all McClellan's connection with the Army of the Potomac. He had done much to make it, God knows. He was great as an organizer and instructor. He had the faith and regard of most of the officers and the love of all the men. It was in battle and campaign that he failed them, not they him, for mortal man had never deeper devotion than was accorded Little Mac until he took the field. Even now, this sad November day, there are scores of officers and soldiers whose faces are furrowed with tears as they see him ride away. There are many commands that would gladly recall him. There are regiments that could not be made to cheer him after Antietam that mourn his going now, even in the hard-used First corps.

Changes, too, have occurred in many a minor grade. The Fifth corps mourns the loss of the brilliant, gifted, handsome soldier whose head is demanded as one result of the woful misadventures about Manassas. Old names appear at the head of grand divisions, as Burnside calls the doubled corps. New names, comparatively, appear at corps headquarters. New brigadiers, a full crop, ride up from the roster of field officers, and not so many now hail from the ranks of influential but unskilled civilians. New regiments have been grafted on old brigades; new blood injected into old and toughened veins. It is high time our friends of the Iron name had reinforcement, for despite Wisconsin's praiseworthy course of recruiting veteran commands as well as raising new ones, their ranks are woefully thin; so, as neither Badger nor Hoosier regiment comes to swell the Army of the Potomac, there is assigned to the old brigade, thereby assuring its distinctive western character, a brand new, ambitious and, as it turns out, most gung-ho and faithful array of Wolverines, "all teeth and toe-nails." The Badgers, who take them under advisement, and so the much-vaunted menagerie is complete again.

Changes, too, have come to the staff, and to Benton's blushing delight, he is called upon at Catlett's to "wet" a new commission, recommended by his old general and heartily approved by the new. It is Capt. Benton, additional aide-de-camp now, and he rides for the time being with a division commander famous for staying qualities, if not for urbanity, a man who is of the fight-to-a-finish mold, and would hang every rebel from Maine to Mexico. We have had few as yet of these vehement patriots in high places. We have had far too many, storms Stanton in Washington, of those who would handle treason with gloves, furnish guards for the homesteads of hard-fighting chiefs on the southern side, hold commerce and communion through flags of truce with former comrades across the lines. "We must stop it, by heaven!" says Stanton, splitting a table top with one blow of his fist. "We must drumhead and shoot 'em," says Fred's new commander, "and I'll hang the first man of my staff that I catch."

"The winter of our discontent" indeed! With gloomy heart and sad satisfaction Benton rides away through the leafless woods to the old familiar scenes about Fredericksburg. Word from Washington has brought him little comfort. Rumor of his commander's sayings has filled him with foreboding.

(To Be Continued.)

PECK'S BAD BOY ABROAD



The Bad Boy and His Dad Meet the Cream of the Harem—"Little Egypt" Does a Dancing Stunt—The Sultan Wants to Send Fifty Wives to the President.

BY HON. GEORGE W. PECK.
(Ex-Governor of Wisconsin, Former Editor of Peck's Sun, Author of "Peck's Bad Boy," etc.)

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Constantinople, Turkey. My Dear Grocerpasha: When I wrote you last I thought you would be mourning for dad and I before this, as there seemed nothing for the Turks to do but to kill us after we had stamped the sultan and all his soldiers by giving them a university yell, but after we had been confined in a sort of jail over night, dad and I had a heart to heart talk, and my diplomacy saved us for the time being. I told dad that what we wanted to do was to tell the Turks that dad represented the American people, and had a communication to make to the sultan personally, which would make him rich and happy.

Well, say, they bit like a bass, and the next day they took us before the sultan, at the palace. Dad dug up a package of blank gold mining stock, in a mine that he was going to promote, though the mine was only a small hole



The President Said He Must Bring His Folks.

In the ground, and the stock had been offered for one cent a share, the par value being a hundred dollars, so a man who got a share for a cent would, when the mine got to paying, get a hundred dollars for every cent he invested.

Dad filled out one of the stock certificates for 1,000,000 shares, which would represent a capital equal to all the debts of Turkey, and we went before the sultan, and we couldn't have been treated better if we had owned a brewery. Dad told his story to the sultan, through an interpreter, while I looked around at the gorgeous surroundings and tried to think of something to do to wake them up.

Dad said he came right fresh from the American people, and was authorized by his mining company to present the sultan with untold millions, for pure love of the Turkish people, whom they had seen riding and leading camels at the Chicago world's fair, and dad produced the stock certificate for 1,000,000 shares of stock in the Golden Horn Gold Mining and Smelting company, and took out a handful of \$20 dollar gold pieces and showed them to the crowd as specimens of gold that came from our mine.

He said our people did not expect anything in return, but just desired the good will of the Turkish empire. He said that President Roosevelt desired him to present his warmest regards to the sultan, and to invite him to visit America, and if he would consent to do so, an American war vessel would be furnished for him and the white house would be turned over to him for his harem, and dad said the president wanted him particularly to impress upon the sultan that if he came he must bring his folks, all his wives that would be apt to size up for beauty with our American women.

Well, you ought to have seen that sickly looking sultan brace up when dad handed him the millions of mining stock, and he grabbed the paper like an old clothes buyer would grab a dress suit that a wife had sold for 60 cents, belonging to her husband. He also wanted to see the gold that dad had shown as coming from the mine, and when dad showed him the yellow boys he took them as souvenirs and put them in his girdle, and then I thought dad would faint, but he kept his nerve like a poker player betting on a boobyal flush.

The sultan asked so many questions about America that I was afraid dad would get all balled up, but he kept his nerve and lied as though he was on the witness stand trying to save his life. Dad told the sultan he was authorized by the American people to inquire into the industries of Turkey, and what he particularly desired was an insight into the harems, as a national institution, because many American people were gradually adopting the customs of the orient, and he desired to report to congress as to whether we should adopt the customs of Turkey, with her dried prunes and dates with worms in, and her attar of roses made of pig's lard; her fez, to cure baldness, and her outlandish pants and peaked red Morocco shoes, and her harems.

The sultan said he would like to show us a little bunch of the cream of the harem, who would do a stunt in the way of dancing, to celebrate the good feeling of the American people, and the visit of the distinguished statesman and gold miner to his realm, and dad said the sultan couldn't turn his stomach with no cream of the harem, only they must keep their hands off him, and the sultan promised he should be as safe as a "unique," whatever that is.

Dad and I had hired knee breeches and things of a masquerade ball store, and we didn't look half bad when the crowd of shrikes and things formed a crescent around the sultan, who sat in a sort of barber's chair with an awning over it, and they sounded a hewag or something, and about a dozen pretty fine looking females, dressed like the ballet in a vaudeville show, came

When Majorities Are Wrong

By DR. FRANK W. GUNSAULUS.

delusive than the idea that a majority settles a question. The world is full of religious liars, men who are like a watch well made and wound, but whose face and dial hands point to 3:30 at 10 a. m. They were made right and wound right and keep going, but they have never been set right.

in and began to dance before the sultan.

Dad stood it first rate until a girl got on the carpet barefooted and began one of those willowy sort of dances that nearly broke up the Chicago fair, when people left the buildings filled with the work of the world's artists, in all lines of progress, and went to the Midway in a body to see "Little Egypt," but when this dancer languaged up to dad and wiggled in a foreign language, dad sashayed up to her and I couldn't hold him back.

He was just getting warmed up to "balance to partners," when a frown came over the sultan's face, and he looked cross at dad, and then the hewag sounded, and the girls scattered out of side door, and dad waited to follow, but I held him by the coat, and it was over. I think those girls were the only ones in the whole harem that were good looking.

Dad breathed hard a little from his exercise, and said he was ready to inspect the stock, and the sultan detailed a tall negro, with a face dried up like a mummy, and we started out through the harem, dad pulling the long hair on the side of his head over his bald spot, and throwing his shoulders back and drawing in his stomach, to make him look young.

Well, say, there is nothing about a harem, much different from keeping house at home, except that there is more of it. The idea people get of harems is that the women are all young and beautiful, and that they sit around a swimming tank and play guitars and keep the flies off the mat who owns the place, while he smokes the vile Turkish tobacco burning in a jardiniere, through a section of rubber hose, and goes to sleep like a Chinaman smoking opium, and that they drink rare wines and dance with bangles on their legs and ropes of pearls on their necks and arms.

I have seen alleged imitations of a Turkish harem on the stage, with American girls doing the acting, and it would make you feel as though you would invest in a harem when you got old enough, but, gee, when you see a regular harem, run by an up-to-date Turk, you think of the Mormon apostle who has 40 wives of all ages, from 70 down to a 16-year-old hired girl, with a hairly and warty on her thumbs. This harem was like a big stock barn in the states, with a big room to exercise the colts, and box stalls for the different wives and their families to live in and do their own cooking and washing.

Instead of sitting by a bath playing a harp, the poor old wives stand by a washbasin and play tunes on the washboard, and scrub, and take care of children. I thought the custom of spanking children was an American institution, but it is as old as the ages. For I saw a Turkish mother grab up a child that had lifted a kitten by the tail, and take it across her knee and give it a few with a red hand covered with soapuds, and the young Turk yelled bloody murder, just like an American kid, and then sat down on his knees, so the spanking wouldn't hurt, and called his mother names in a language I couldn't understand, but I knew what the child said, by instinct. Dad started to interfere, because he is a member of the humane society, but the unique that was showing us around saved dad's life by pushing him along, before the woman got a chance to brain him with the washboard.

The women mostly had on these baggy Turkish trousers, like the Zouaves wear, and a jacket, and a cloth around their heads, and they acted as though if the next meal came along all right they would be in luck. We saw a few women pretty white, and they were Circassian slaves, with big eyes and hoops in their ears, and a little different clothes on, but there were none that dad would buy at an auction, or at a bargain sale, if they were marked down to 99 cents.

We passed one woman running an American sewing machine, and dad



He Was Just Getting Warm'd Up to "Balance to Partners."

said he'd bet she was an American, and he went up to her and said: "Hello, sis!" She stopped the machine, looked up at dad with a sort of Bowers expression, and said: "Gwan, Chauncey Depew, you old peach, or I'll have you pinched," and the unique took dad by the arm and pulled him along real spry, but he hung back and looked over his shoulder at the woman, but she went on sewing, and dad said to me: "Well, wouldn't that frost you?" And we went on making the inspection.

I don't think I ever saw so many children, outside of an orphan asylum, all about the same size and all looking exactly alike. They all had the same beady black eyes that look as though they were afraid of getting caught in a trap, like muskrats, and their noses had the same inquiring appearance, as

Righteousness is a quality of mind. Spiritual things are those of quality. Majorities are usually wrong on spiritual issues. Because all say so is no sign that it is so. Nothing is more

AGRICULTURAL HINTS

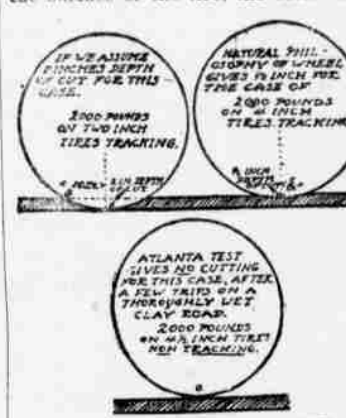
WIDE TIRES FOR ROADS.

Improvement of the Highways Almost Impossible While Narrow Tires Are Used.

Mr. J. M. Heiskell, civil engineer of Memphis, is the author of a bill introduced in the Tennessee legislature which has for its object the regulating of the width of tires on vehicles.

It is contended by those who have studied the subject from a scientific point of view that the wheels used on vehicles of various kinds make or mar the country road, pike or the city street. The subject of street making and street building is one that has been studied for many years, and a correct solution would mean the saving of much money to all the cities and states of this country.

Scientific men have made tests which show that wide tires on heavy traffic vehicles are among the best road makers known to modern times. The wider the surface of the tire, the better it is



THE COMPARATIVE TEST.

For the road, narrow tires not only cut the roadbed, but increase the burden of the horses.

Practical tests were made near Atlanta some months ago, and the illustration shows the result of same.

The bill proposed by Mr. Heiskell is as follows:

"A bill to regulate the width of tires on traffic vehicles.

"Section 1. Be it enacted by the general assembly of the state of Tennessee, that all traffic vehicles, without rubber tires, shall be required to have wheels of one-inch average width for each 250-pound load capacity per wheel. That is to say, a four-wheeled vehicle of 1,000 pounds capacity shall have 1½-inch tires; of 2,000 pounds capacity shall have tires of 2¼ inches wide; of 4,000-pound load capacity, 4½ inches wide; of 5,000-pound load capacity, 6¼ inches wide; of 6,000-pound load capacity, six inches wide; of 7,000-pound load capacity, 6½ inches wide; of 8,000-pound load capacity, seven inches wide. All two-wheeled vehicles of one-half the carrying capacity of the above four-wheeled vehicles are to have wheels with widths of the tires above, respectively.

"Sec. 2. Be it further provided, that anyone violating the provisions of this act by the use of tires of width less than herein required shall, upon conviction, be fined not less than \$5 and not more than \$25 for each offense.

"Sec. 3. Be it further enacted, that this act take effect six months after passage of the same."

In an interview, Mr. Heiskell says: "A very important point is the table of test results of the Missouri experiment station, relied on by L. O. Baker (professor of civil engineering, University of Illinois) and others is wrong in so far as it seems to support an idea that 'wide wheels pull harder.' Out of 24 conditions tested only three have any appearance of confirming such erroneous notion. One of these three 'shows' 35 per cent. disadvantage of good macadam road over bad earth road, and 65 per cent. disadvantage of good earth road over bad earth roads.

In discussing his measure Mr. Heiskell said that good roads are not possible with narrow tires. He said that his idea was that such a bill should be passed as would not become a dead letter by reason of the fact that it was obnoxious to the people. The cost of roads and streets is divided into three parts: The cost of making them; the cost of bringing them back to their original condition—these should be cut out—and the cost of improvement upon the original condition. This cost could be cut down about half. Wide tires leave the roads in better condition than before passing over. Narrow tires have just the opposite effect. Mr. Heiskell quotes many authorities on road building in support of this position.

"In the other two cases the 'showing' of any disadvantage from wide, six-inch wheels, is due solely to mud made by the narrow 1½-inch tires.

"Besides, and very much so at that, tests Nos. 2, 3, 4, 5 on bad gravel roads show 23 per cent. greater pull for the 1½-inch tires; 7 and 8 show 60 per cent. more pull on bad earth roads; 11, 12 and 13 show 33 per cent. more pull on bad earth roads, and 14 and 24 show 47 per cent. more pull on farms, for the 1½-inch tire than for the six-inch tire, all other conditions being equal.

"Atlanta test (if not the New York three years' experience as well), plainly shows that after abatement of the 1½-inch tires, which fixed conditions of tests, the six-inch wheels would have pull in tests 1 to 13, about 110 pounds per ton of load, whereas the narrow wheels did pull about 440 pounds per ton."

Pear Culture Expensive.

The culture of pears has proved itself so far an expensive enterprise. Many a man who has tried to grow pears, has given it up with the declaration that all the pears he ever succeeded in growing cost him more than oranges. This has been due to a single obstacle—the susceptibility of the pear tree to blight. More often than not the pear orchard falls before the scourge. Any man that can develop a blight-proof pear tree that bears fruit of good quality will make his fortune.